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| 10/755,771      | 01/12/2004  | David Clarence Howard | 129659              | 1293             |

7590 05/22/2006

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EXAMINER

JAGAN, MIRELLYS

ART UNIT

PAPER NUMBER

2859

DATE MAILED: 05/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/755,771

Applicant(s)

HOWARD ET AL.

Examiner

Mirellys Jagan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15, 17, 19 and 20 is/are rejected.
- 7) ☒ Claim(s) 16 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 20 is objected to because of the following informalities:

Claim 20 states that the attachment end, i.e., 304 in figure 3, of the adapter post is configured to couple to the gas turbine engine, i.e., 94, and then states that the compression seal ring, i.e., 328, is engaged by a wall of the turbine engine. Therefore, it is not clear how a wall of the turbine engine engages the compression seal ring since the compression seal ring is located above the gas turbine engine (94). Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-15, 17, 19, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,300,774 to Hollis et al [hereinafter Hollis].

Referring to claims 1-11, Hollis discloses a method of mounting an instrument probe using an adapter post, said method comprising:

securely coupling an attachment end of the adapter post to a first wall (wall 1) defined between a cavity and an annulus by threadably coupling the attachment end to the first wall;

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coupling an opposite sealing end of the adapter post to a second wall (wall 2) defined between the annulus and an ambient area by using a piston-ring arrangement such that the adapter post is inserted through a seal plate (24) having at least one compression seal ring (28) that is engaged by the second wall;

sealing the adapter post to compensate for a relative movement between the first wall and the second wall such that a sealing arrangement absorbs axial and radial movement; and

inserting the instrument probe (40) at least partially within the adapter post to monitor a process parameter within the cavity;

wherein sealing the adapter post comprises sealing the adapter post between the cavity and the annulus, the annulus and the ambient area, and the cavity and the ambient area; inserting the instrument probe comprises sealingly coupling the probe to the second wall at least partially within the adapter post using a compression-ring sealing arrangement (in 20); and the instrument probe includes a damper (above 40) wherein inserting the instrument probe at least partially within the adapter post comprises slidingly inserting the instrument probe at least partially within the adapter post to facilitate reducing radial motion of the instrument probe within the adapter post (see figure 2; column 2, lines 18-65).

Referring to claims 12-15, 17, and 19, Hollis discloses a mounting assembly for mounting an instrument probe within a cavity, the assembly comprising:

an instrument probe comprising a probe head coupled to a probe sensor (40);

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an adapter post (12) comprising an attachment end (at wall 1), a sealing end (at wall 2) having a seal ring groove, and a hollow body extending therebetween, said body configured to receive said probe sensor at least partially therein;

a seal plate (24) comprising an aperture sized to receive said adapter post therethrough, a first face and a second opposing face, said first face comprising a first face-seal groove substantially circumscribing said aperture, wherein said first face seal groove is configured to receive at least a portion of a compression seal ring (28) that is positioned to engage a wall (wall 2) defining the cavity; and

a sealing arrangement (20) extending substantially circumferentially around said adapter post, said sealing arrangement configured to absorb axial and radial movement;

wherein said attachment end is configured to couple to a first wall (wall 1), said sealing end is configured to couple to a second wall (wall 2) that is spaced a distance from the first wall; the probe head is configured to couple to the second wall; said probe sensor comprises an elongate body, and at least one damper (above 40) configured to slidably engage a radially inner surface of said adapter post; the adapter post sealing end further comprises a seal groove; and the seal ring groove is configured to receive at least a portion of a compression seal ring (28) therein.

Referring to claim 20, Hollis discloses a mounting assembly for mounting a temperature probe to a gas turbine engine, said temperature probe mounting assembly comprising:

a temperature probe comprising a probe head coupled to a probe sensor (40) extending from said probe head, said probe sensor comprising an elongate body and a damper coil wire (30) helically wound around at least a portion of said body;

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an adapter post (12) comprising an attachment end (at wall 1) configured to couple to the gas turbine engine, a sealing end (at wall 2) comprising a circumferential seal groove configured to receive a seal ring (28) partially therein to facilitate sealing contact between said sealing end and a wall, and a hollow body extending between said sealing end and said seal ring, said body sized to receive at least a portion of said probe sensor therein;

a seal plate (24) comprising an aperture sized to receive said adapter post therethrough, a first face, and an opposing second face, said first face comprising a circumferential seal groove circumscribing said aperture, said seal groove sized to receive at least a portion of the compression seal ring (28) therein, said compression seal ring engaged by a wall; and a sealing arrangement (20) extending substantially circumferentially around said adapter post, said sealing arrangement configured to absorb axial and radial movement.

*Allowable Subject Matter*

4. Claims 16 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record does not disclose or suggest the following in combination with the remaining limitations of the claims:

A mounting assembly for mounting an instrument probe within a cavity, the assembly comprising:

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at least one damper, wherein the damper comprises a coil wire that is helically wound around at least a portion of the body (see claim 16); or

a seal plate, wherein the seal plate second face comprises a seal groove circumscribing the aperture (see claim 18).

### *Response to Arguments*

6. Applicant's arguments with respect to claims 1, 12, and 20 have been considered but are moot in view of the new ground(s) of rejection.

### *Conclusion*

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mirellys Jagan whose telephone number is 571-272-2247. The examiner can normally be reached on Monday-Friday from 11AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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MJ

May 15, 2006

A handwritten signature in black ink, appearing to read 'M. Jagan', with a long horizontal flourish extending to the right.

**Mirellys Jagan**  
**Patent Examiner**  
**Technology Center 2800**